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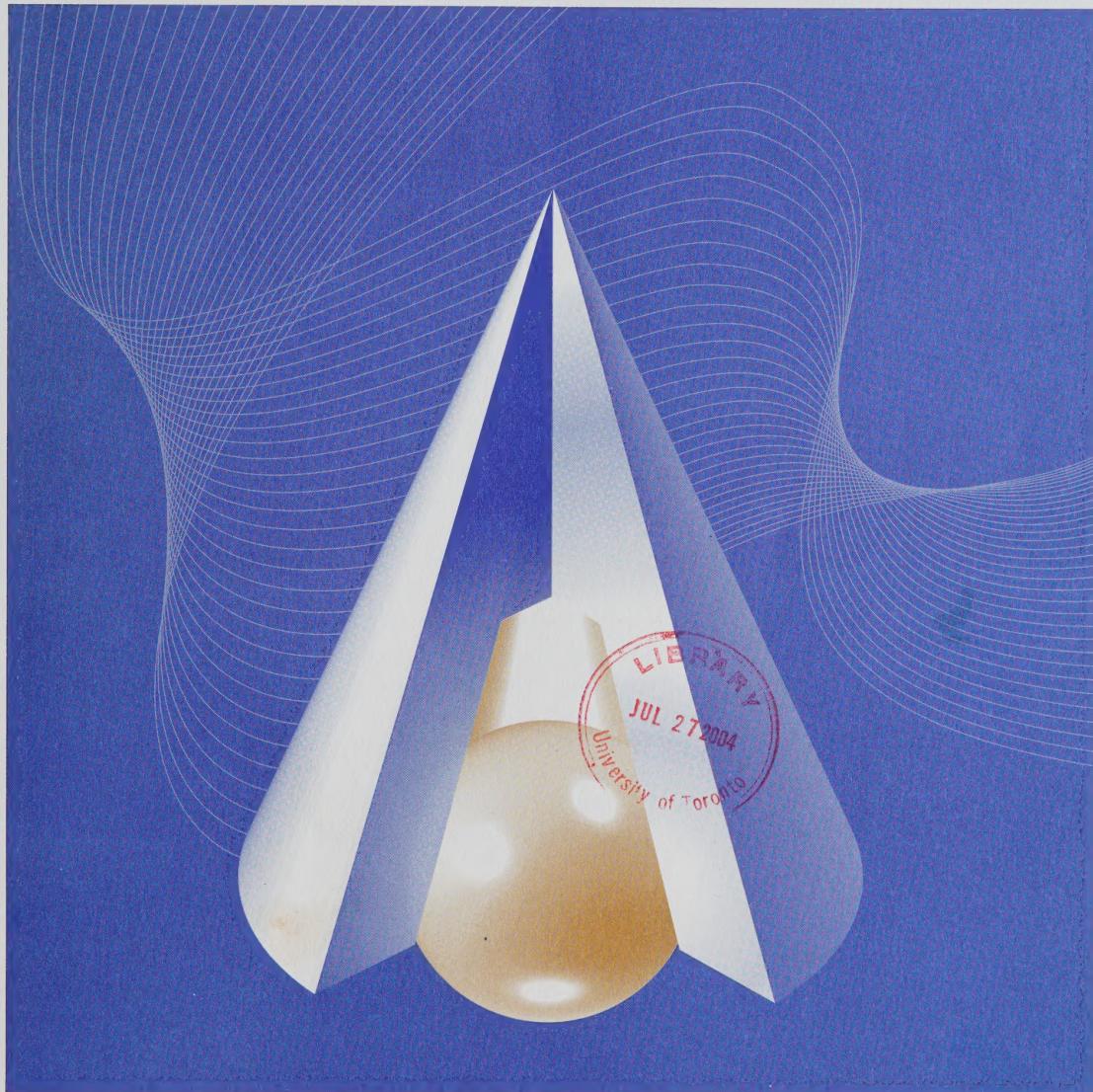
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*The Deteriorating Economic Welfare of Immigrants and
Possible Causes*

by Garnett Picot

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The Deteriorating Economic Welfare of Immigrants and Possible Causes

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ABSTRACT

This paper reviews the increase in the earnings gap between immigrants and Canadian-born over the past two decades, and the current explanations of this labour market deterioration among recent immigrants in particular. The paper also outlines the rising gap in low-income rates between immigrants and non-immigrants. Like previous research, the paper concludes that the earnings gap at entry has increased for immigrants entering Canada during the 1990s, as compared to those of the 1970s. Furthermore, the gap in the low-income rate has been increasing. The rate of low income has been rising among immigrants (particularly recent immigrants) during the 1990s, while falling among the Canadian-born. The rise in low-income rates among immigrants was widespread, affecting immigrants in all education groups, age groups, and from most source countries (except the “traditional source regions”). Immigrants with university degrees were not excluded from this rise in low-income rates, in spite of the discussion regarding the rising demand for more highly-skilled workers in Canada. As a result of both rising low-income rates among immigrants, and their increasing share of the population, in Canada’s major cities virtually all of the increase in the city low-income rates during the 1990s was concentrated among the immigrant population.

This paper also reviews the explanations discussed in the literature for this economic deterioration. The change in the characteristics of immigrants (e.g., from different source regions, rising levels of educational attainment, etc.) appears to have accounted for about one-third of the increase in the earnings gap at entry (i.e., the gap between immigrants and comparable Canadian-born). Decreasing economic returns to foreign work experience is another factor that appears to play a large role, as is declining return to years of schooling. Numerous other possible explanations are also discussed.

Keywords: immigrants, poverty, earnings, assimilation, immigration

1. Introduction

Host countries such as Canada look to the skills and initiative of immigrants to promote economic growth. Immigrants, in turn, look to the host country for opportunities to exploit their skills and abilities. These considerations are particularly important when immigrants are highly educated. Host countries are increasingly seeking highly-educated immigrants to drive economic growth in the “knowledge-based” economy, and immigrants look to exploit their higher education levels to achieve high economic standards of living.

Immigrants arriving in Canada during the late 1990s were definitely highly educated. In 2001, fully 42% of adult “recent” immigrants (those arriving during the previous five years) had a university degree, and a historically high 54% entered under the “economic” admissions class (only 31% in the family class). The situation was very different, twenty years earlier. In 1981 only 19% of recent immigrants had degrees, and during the early 1980s, 37% entered in the “economic” class, with 43% in the family class. Immigrants of the late 1990s were increasingly selected because of their potential contribution to the Canadian economy.

However, if immigrants are unable to convert their training to productive use, the expectations of both the host country and the arriving immigrants remain unmet. Immigrant contributions to the host country, which are central to the economic justification for relatively open immigration policies, may not be fully realized. In light of these considerations, there is considerable concern regarding the deteriorating economic outcomes among recent immigrants over the past two decades.

The analysis of employment *earnings* of immigrants is the most studied area of immigrant economic assimilation in Canada. Early findings indicated that newly arrived immigrants had lower earnings than comparable non-immigrant workers, but their initial earnings gap narrows significantly as they adjust to the labour market in the receiving society (Chiswick, 1978; Meng, 1987). More recent research suggests that the initial earnings gap may not close as quickly as earlier thought, even among groups entering during the 1970s (Hum and Simpson, 2003). Whatever the earnings gap at entry, and in the years following entry, during, say, the 1970s, these gaps increased in the 1980s and 1990s. Subsequent research indicated an emerging trend during the early 1980s of declining earnings among successive waves of immigrants relative to the Canadian born (Bloom and Gunderson, 1991; Abbott and Beach, 1993). A number of studies then asked if the decline was associated primarily with recessions, or the changing mix of immigrants by source country, and if this decline had abated during the late 80s (McDonald and Worswick, 1998; Baker and Benjamin, 1994; Grant 1999). More recent studies have concluded that the decline in entry level earnings of immigrants did continue through the early 1990s (Reitz, 2001). Research studies initiated by the research groups of Citizenship and Immigration and Statistics Canada, using even more recent data, observe relatively little improvement during the late 1990s (Green and Worswick, 2002; Frenette and Morissette, 2003). Some studies note that although there has been a large decline in entry level earnings, the rate of growth in earnings with years in Canada is faster than among earlier cohorts (Li, 2003)

As important as studies of employment earnings are, they provide only part of the picture. They exclude the unemployed and those out of the labour market. They also exclude changes in all

sources of income other than earnings, such as social transfer benefits. During periods of deteriorating labour market outcomes such studies may underestimate the decline, in particular because they exclude the effects of possibly rising unemployment or the discouraged worker effect.

This paper briefly reviews the earnings decline among immigrants through the 80s and 90s. To provide a better overview of economic welfare outcomes among immigrants, the paper also reviews low-income trends among immigrants, recent immigrants in particular. The low-income rate¹ is a simple yet comprehensive measure of changing economic welfare among families at the bottom end of the income distribution. It reflects changes in unemployment, earnings, social transfers and other income sources.

This paper focuses on the late 1990s, a particularly important period. Given the increasing “economic” nature of immigration and the very significant economic recovery in the late 1990s (as unemployment fell from 9.4% to 6.8% between 1995 and 2000), one might have anticipated a marked improvement in immigrant economic outcomes. If the deterioration was simply related to the recessions of the early 1980s and 1990s, then by 2000 there may well have been a return to the better outcomes observed in the late 70s. The late 1990s is in this sense a sort of watershed; a period during which one looks for a return to the “good old days” of immigrant labour market outcomes. This paper also focuses on outcomes of highly-educated recent immigrants. One might expect this group to convert their training to productive use during a period of rapid economic growth, the expansion in the information and communications technologies sector, and the general expansion in the knowledge-based economy.²

This summary paper draws on the findings from two papers in particular, Picot and Hou (2003) and Frenette and Morissette (2003). The conclusion summarizes some of the more prevalent possible explanations, from various papers, for the declining outcomes of entering immigrants. The results reported are based on data from the 1981, 1986, 1991, 1996 and 2001 censuses.

2. The Declining Entry Level Earnings Among Immigrants

In spite of the increasingly economic nature of immigration during the late 1990s, earnings among male adult “recent” immigrants who worked full-time full-year fell by 13% between 1980 and 2000, two years that are in roughly the same position in the business cycle (Frenette and Morissette, 2003). Among recent female immigrants earnings rose 6%. During the same period, earnings among Canadian-born working full-time full-year rose by 10% for men, and 11% for women.

These numbers can be put in a longitudinal perspective by focusing on particular cohorts of immigrants. These cohorts consist of immigrants who entered Canada during a five-year period,

¹ The proportion of the population with family incomes below Statistics Canada’s Low-Income Cutoff (LICO), fixed at the 1992 level, and adjusted only for changes in the CPI. Hence, over the period of study this is a “fixed”, not a relative low-income measure.

² The “high-knowledge” sector was the fastest growing sector during the late 90s; employment grew by 28.6% compared to 6.4% for the economy as a whole.

say between 1975 and 1979, or 1990 and 1994. The earnings of the immigrants in each cohort are computed (as a proportion of the earnings of the Canadian-born) for the cohort after one to five years in Canada, six to ten years in Canada, and so on. In this way, one can determine: (a) the extent to which the earnings gap at entry between immigrants and Canadian-born is reduced with years spent in Canada, and (b) whether the earnings gap at entry is increasing.

Chart 1 suggests that the earnings gap for the cohort of the late 1970s was more than closed after twenty years in Canada. After 21-25 years adult immigrants working full-time full-year earned about 8% more than the Canadian born (both men and women). However, the earnings gap at entry has been increasing with successive cohorts. Among men, the cohort of the late 1970s earned 90% of that of the Canadian-born at entry³ and among the early 1990s cohort, this number had fallen to 67%. Among the late 1990s cohort, however, the entry earnings gap appears to have been reduced significantly (compared to the early 90s cohort, for example), as recent immigrants earned 77% of that of the Canadian-born. The gap remained much greater than in the 1970s.

However, these charts compare all Canadian-born with all immigrants. We know that these two groups are very different regarding characteristics that affect their earnings potential. In particular, immigrants have been more highly educated than Canadian-born for many years, and their education level has increased rapidly, particularly during the late 1990s. A more appropriate analysis compares recent immigrants to “like” Canadian-born, along dimensions such as age, education, visible minority status, marital status and region of employment (including major city). This is typically done within a regression format that computes the log of the ratio of the earnings of immigrants to those of the Canadian-born. The results of such an analysis by Frenette and Morissette (2003) are given in Chart 2. The log earnings ratio is an approximation of the earnings of immigrants as a proportion of those of comparable Canadian-born when the differences are small (say 10% to 20%), but when they become large (say 40% to 50%) the log (earnings ratio) over-estimates the percentage difference.

This analysis provides a somewhat different picture (panel A of Chart 2). As in Chart 1, the earnings gap has been increasing significantly with each successive cohort, both at entry and after many years in Canada. However, this increase is greater after accounting for the differences between immigrants and Canadian-born. Among males, the log earnings ratio at entry declined from .83 among the late 70s cohort to .55 among the early 90s cohort. Furthermore, in this analysis, one sees only a minor improvement in the earnings gap at entry between the cohorts of the early and late 1990s (log earnings ratio increased from .55 to .60). The relatively little improvement seen here compared to Chart 1 is likely because the late 90s cohort was much more highly educated. After accounting for this higher education level and the associated higher earnings expectation, little improvement in entry level earnings is observed. The earnings gap at entry remained much greater than among the cohorts of the 1970s or 1980s.

As noted earlier, the traditional “economic assimilation” story among immigrants is that they earn less at entry, but after a number of years in Canada the earnings gap with comparable Canadians narrows, or disappears (Carliner, 1981; Chiswick, 1978; Borjas, 1985; Meng, 1987). In Chart 2, the traditional pattern is observed among cohorts entering in the late 1970s, but this is the last cohort to display any signs of eliminating the earnings gap after many years in Canada.

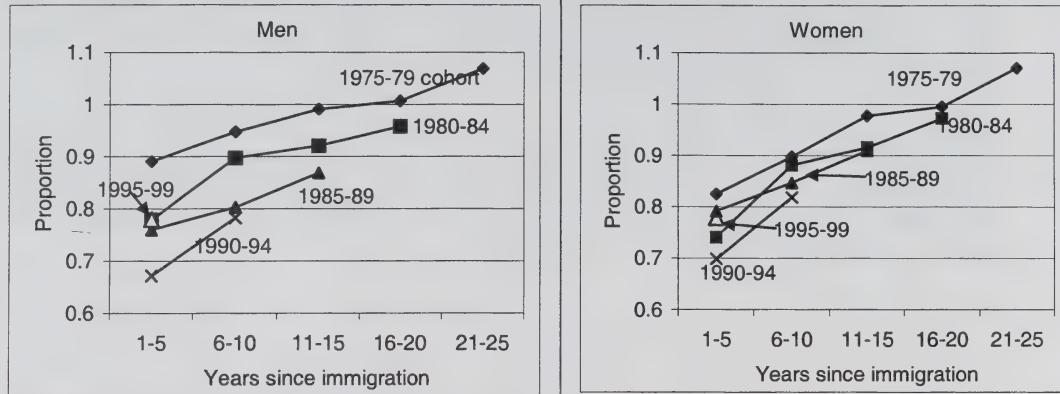
³ i.e., earnings of immigrants in Canada for 5 years or less.

Even among this cohort, earnings do not surpass the earnings of the Canadian-born (as they did in Chart 1), but they do almost catch-up, reaching about 97% of the earnings of “like” Canadian born after more than 20 years (Chart 2). But among the more recent cohorts, elimination of the earnings gap will be more difficult. The cohorts entering during the 1980s, even after 16 to 20 years in Canada were earning approximately 85% of their Canadian counterparts (Chart 2). For the 1990s cohort, after 6 to 10 years in Canada, the early 1990s cohort was earning roughly 70% (log earnings ratio of .7) of Canadians. It is not clear that they can “catch-up” to Canadians in 20 years. Again, the pattern is similar for women.

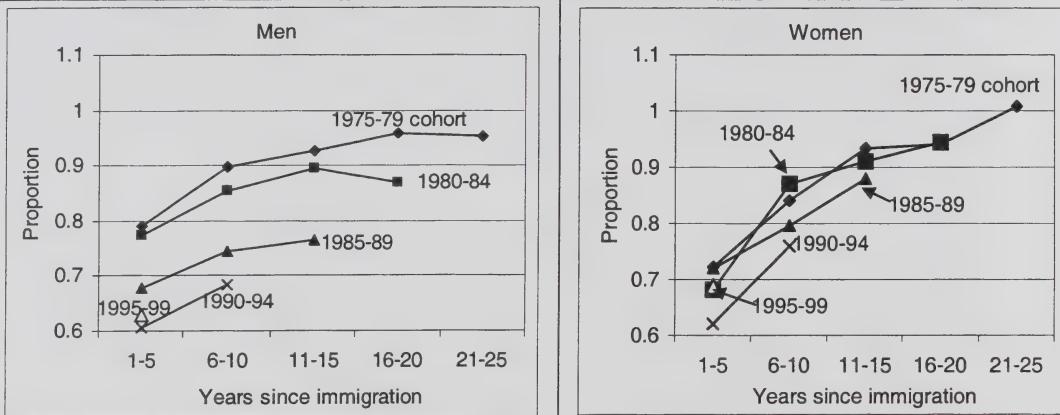
However, it is important to note that the greater the earnings gap at entry, the faster the improvement in earnings (Chart 2). Hence, the rate of improvement in earnings (i.e., the slope of the line in Chart 2) was much greater among the 1990s cohorts than the 1980s cohorts. In spite of this, however, earnings remained lower among the more recent cohorts than among earlier cohorts, no matter how long they had been in Canada.

Chart 1: Earnings of Immigrants as a Proportion of Those of Canadian-Born
 - no controls for differences between the two populations -

A. Full-time Full-year Workers Aged 16 to 64



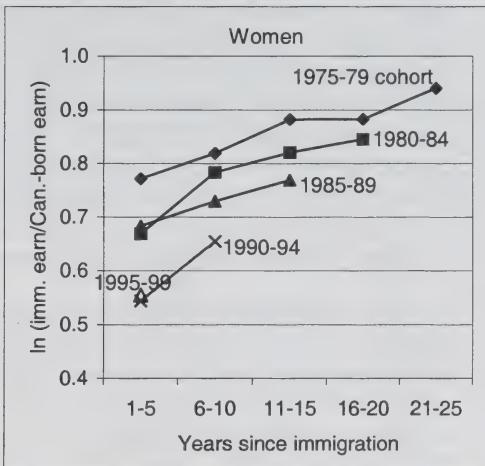
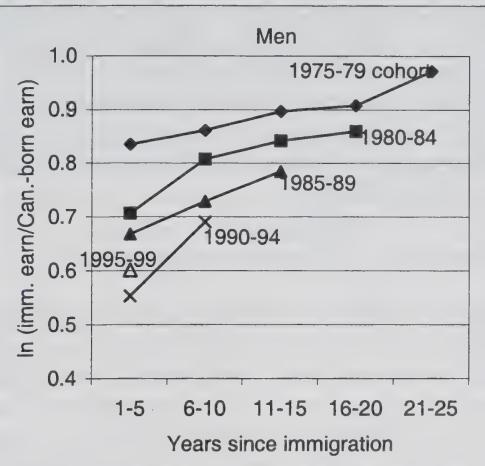
B. University Bachelors Degree Graduates, FTFY Aged 16-64



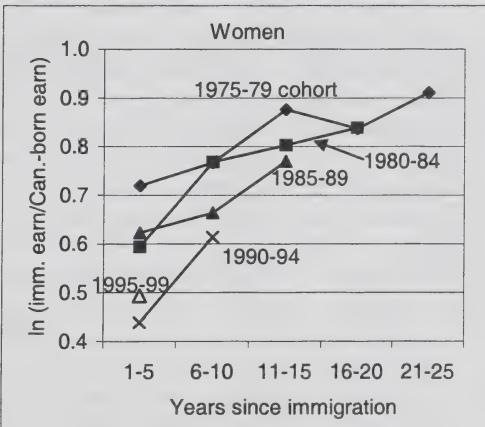
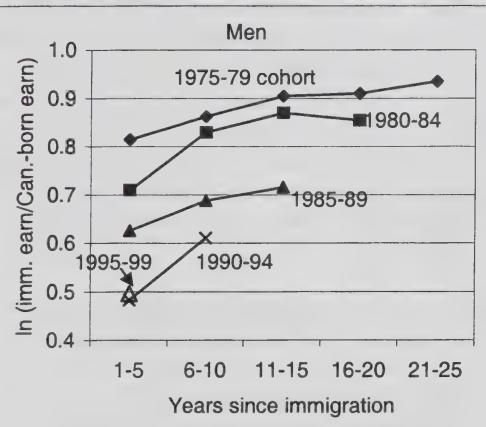
Source: Frenette and Morissette, 2003

Chart 2: Log Earnings* Ratio**: Earnings of Immigrants Compared to Those of Comparable Canadian-Born

A. Full-time Full-year Workers Aged 16 to 64



B. University Bachelors Degree Graduates, FTFY Aged 16-64



* Predicted values based on a model controlling for education, estimated work experience, visible minority status, marital status, and regions (including the major cities).

** The \ln (immigrant earnings/Canadian-born earnings). For small differences in earnings (10% to 20%), the \ln earnings ratio is an approximation of the earnings of immigrants as a proportion of those of Canadian-born. For large differences (e.g., 40% to 50%), the log earnings ratio tends to overestimate the percentage difference.

Source: Frenette and Morissette, 2003

Earnings Declines at Entry were as Great Among the University Educated

The bottom panels of Charts 1 and 2 display similar results for immigrants with bachelors degrees. Among men working full-time full-year, immigrants entering during the late 70s earned about 82% of their Canadian-born counterparts (log earnings ratio of .82, controlling for estimated years of work experience, and geographical region of employment). By the 1990s, the log earnings ratio had fallen to around .5. Some minor improvement was observed between the early and late 1990s, but relative entry level earnings remained well below that of the cohorts of the 1970s or 1980s. Once again, the pattern is similar for women. “Recent” immigrant university graduates were increasingly unable to convert their education and experience into earnings in the way that earlier cohorts had. As with all immigrants, however, the larger the earnings gap at entry, the faster the growth in earnings (with years spent in Canada).

3. The Deteriorating Low-Income Position of Recent Immigrants

Earnings represent the major income source for most families, so it is not surprising that the decline in relative entry level earnings is reflected in the low-income rates. The proportion of recent immigrants with family incomes below the low-income cutoff⁴ rose from 24.6% in 1980, to 31.3% in 1990, and 35.8% in 2000. These years are roughly at business cycle peaks, and hence are reasonable indicators of longer-term trends. During this period, the low-income rate among the Canadian-born fell, from 17.2% in 1980 to 14.3% in 2000. Hence, it was not a general deterioration in economic conditions affecting all Canadians that was responsible for the rising low-income rates. Recent immigrants had low-income rates 1.4 times that of Canadian-born in 1980, and by 2000 this had increased to 2.5. There was improvement between 1995 and 2000 in the low-income rate among recent immigrants (falling from 47.0% to 35.8%). However, most of this change did not represent a longer-term trend in improved outcomes, but simply the expected decline during a very strong economic recovery. The *relative* low-income rate of recent immigrants (relative to Canadian born), improved only marginally (falling from 2.7 to 2.5 times higher). This deterioration in low-income rates over the past 20 years was not restricted to recent immigrants. It was observed among all immigrant groups, no matter how long they have resided in Canada (Table 1), with the exception of immigrants living in Canada for more than 20 years.

Table 1. Low-income rates by immigration status, Canada, 1980-2000

Total population	Non-immigrants	All immigrants	Low-income rate*						Low-income rates relative to Canadian-born					
			Years of residence in Canada						Years of residence in Canada					
			<= 5	6 - 10	11-15	16-20	> 20	All immigrants	<= 5	6 - 10	11-15	16-20	> 20	
1980	0.171	0.172	0.170	0.246	0.187	0.144	0.147	0.167	1.0	1.4	1.1	0.8	0.9	1.0
1985	0.187	0.185	0.193	0.342	0.260	0.198	0.159	0.165	1.0	1.8	1.4	1.1	0.9	0.9
1990	0.155	0.151	0.171	0.313	0.242	0.190	0.152	0.126	1.1	2.1	1.6	1.3	1.0	0.8
1995	0.191	0.176	0.247	0.470	0.353	0.272	0.221	0.155	1.4	2.7	2.0	1.6	1.3	0.9
2000	0.156	0.143	0.202	0.358	0.283	0.227	0.191	0.133	1.4	2.5	2.0	1.6	1.3	0.9

* After transfer, before taxes; based on the 1992 LICO updated for change in CPI only.

Data sources: the 1981 to 2001 Censuses (20% sample data);

Source: Picot and Hou, 2003

⁴ Statistics Canada's after transfer, before tax LICO (Low-Income Cutoff) is used, since taxes paid are not available in the census data.

The deterioration in family economic welfare among recent immigrants may have been concentrated among particular groups. However, Picot and Hou (2003) concluded that, by and large, this was not the case. The increasing low-income rate was observed among all education groups, all age groups, all family types, and those whose home language was either French/English, or "Other". Source region was the one dimension along which some differences were observed. The low-income rate actually fell between 1980 and 2000 among recent immigrants from a few source regions, such as the U.S., Western Europe, Southeast Asia, and the Caribbean (even after controlling for differences over cohorts in education, home language, family type, and age). However, among the source regions from which three quarters of all recent immigrants originated in 2001, rates were rising (Table 2). This included most parts of Asia, Northern, Eastern and Southern Europe and Africa. These results suggest that some factor (e.g., recognition of work experience or schooling, language skills, school quality, etc.) associated with source regions may play a significant role in the declining economic outcomes of immigrants. More of this later.

Table 2: Percentage Change in the Low-Income Rate, 1980-2000, by Source Region

Source region	Raw data	Controlling for age, education, language, family type
Southeast Asia	-35%	-25%
Western Europe	-24%	-16%
U.S.	-18%	-12%
Caribbean	-2%	-5%
South & Central America	-2%	+1%
Northern Europe	+14%	+24%
Eastern Europe	+22%	+34%
Western Asia	+52%	+64%
Southern Europe	+61%	+115%
East Asia	+68%	+90%
South Asia	+82%	+86%
Africa	+121%	+94%
Source: Picot and Hou, 2003		

Given the widespread nature of the rise in low-income, it is not surprising that Picot and Hou (2003) conclude that less than one-half, and quite possibly much less, of the rise in low-income rates among recent immigrants was associated with their changing characteristics. They could not be more precise because of limitations of the analytical techniques used to determine this effect. The paper focused on the changing mix of immigrants by source region, education, home language, age, and family status. More is said of this finding in the summary discussion at the end of this paper.

Just as the earnings results reported above focused on university graduates, so too did the low-income analysis. Although recent immigrants with university degrees had lower levels of low-income than, say, those with a high school diploma, the rate of increase in low-income during the 1990s was higher among the university-educated immigrants. Among adults with high school

graduation as the highest education level, the rate rose 25%. Among university-educated *recent* immigrants, it rose from 19.1% in 1990 to 27.5% in 2000 (Table 3), an increase of 44%. And there seemed to be no major difference by degree type. Among engineering and applied science degree holders aged 24 to 44, low-income rates rose from 14.7% in 1990 to 24.2% in 2000, in spite of the technology boom that was in place leading up to 2000. In 1990, these recent immigrant degree holders had low-income rates 4.6 times that of their Canadian-born counterparts, by 2000 this was 7.0 time higher. Similar stories are observed for other disciplines. For example, among prime age recent immigrants with teaching, social sciences and commerce degrees, rates rose from 18.2% to 27.7%.

Table 3: Low-Income Rates Among Recent Immigrants Aged 25 to 65, by Education Level			
Highest education level	1990	2000	% change in rate, 1990-2000
Less than high school	34.3	38.4	13.1%
High school graduate	31.0	38.8	25.2%
Some post-secondary	26.4	33.7	27.6%
University degree	19.1	27.5	44.0%

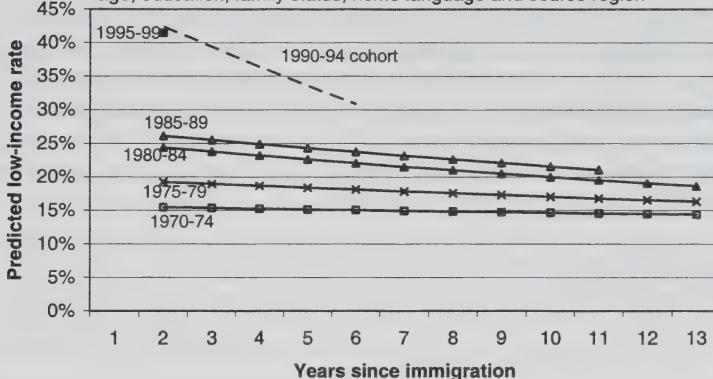
Source: Picot and Hou, 2003

The focus to this point has been on the outcomes for immigrants at entry. What happens as they reside in Canada for a number of years? It was noted earlier that the earnings gap (with Canadian-born) does narrow.

Similar patterns are observed regarding low-income rates. Chart 3 shows the predicted low-income rate at entry for cohorts entering between the early 1970s and late 1990s, as well as the change in this rate with years since immigration (based on a regression model that accounts for differences among cohorts in education, age, marital status, home language and family type). Rates do fall with years since immigration, and perhaps more importantly, the higher the low-income rate at entry, the faster the decline (improvement) in the rates. Hence, there are signs that there is some “catch-up” among the 1980s and 1990s cohorts with earlier cohorts regarding low-income rates. However, in no way is the gap between these groups erased. The low-income rate among immigrants entering during the 1980s and early 1990s remains well above that of earlier immigrants, no matter how long they have been in Canada.

**Chart 3. Predicted Low-Income Rates of Immigrants,
Various Cohorts**

- based on regression model controlling for differences among cohorts in age, education, family status, home language and source region -



Source: Picot and Hou, 2003

The Rise in Low-Income Rates in Canada's Largest Cities was Heavily Concentrated Among Immigrants

A dichotomy appears to have developed regarding low-income rates in Canada, rising among immigrants, and declining among Canadian-born. Overall, the low-income rate among Canadian born fell from 17.2% to 14.3% between 1980 and 2000. Even among groups that one traditionally associates with low-income issues, the rate has been falling. Over the same period, the low-income rate fell by 12.5 percentage points among Canadian-born seniors, by 16 percentage points among lone-parent families, and remained virtually unchanged among Canadian-born young families. As noted earlier, among immigrants (with the exception of those in Canada for more than 20 years) the rate rose.

This fact, combined with the fact that immigrants, particularly recent immigrants, constitute a rising share of the population of the major cities in Canada, suggests that any change in the low-income rate in these cities may be heavily concentrated among immigrants. Picot and Hou (2003) confirm that this is the case. In Canada's three largest cities, where the vast majority of recent immigrants settle, the low-income rate increased between 1990 and 2000. It rose 1.9 percentage points in Toronto, 3.1 points in Vancouver, and only 0.3 points in Montreal. This was in spite of the fact that economic conditions in these cities were similar or much stronger in 2000 compared to 1990. The unemployment rate declined from 10.5 to 7.7 in Montreal, from 7.5 to 5.9 in Vancouver, and rose marginally from 5.2% to 5.5% in Toronto.

In this environment, virtually all of the rise in the low-income rate was concentrated among the immigrant population (Table 4). Two factors contribute to this upward pressure on the cities low-income rate: (1) the fact that immigrants constituted an increasing share of the population (recent

immigrant in particular), and they traditionally have had higher low-income rates than the population in general, and (2) the rise in the low-income rate among immigrants. Combined, these factors tend to increase Toronto's low-income rate by 2.8 percentage points between 1990 and 2000 (Table 4). Most of this increase was associated with immigrants who had been in Canada ten years or less. This tendency towards an increase in the city's rate was somewhat offset by a decline in rates among the Canadian-born, which tend to reduce the cities low-income rate by 0.9 percentage points. The end result was an increase in Toronto's low-income rate of 1.9 percentage points. A similar story holds for the other two cities. In Vancouver, the changing low-income position among immigrants (and their increasing population shares) tend to push up the cities low-income rate by 4.7 percentage points. This was partially offset by changes among the Canadian-born population, which reduced the rate by 1.7 points, resulting in a rise of 3.1 points for the city overall.

Table 4: Change in Low-Income Rate in Canada's Three Largest Cities, 1990-2000

City	Change in cities low-income rate	Change associated with*:	
		Non-immigrants	Immigrants
Toronto	1.9 percentage point	-0.9 p.p.	2.8 p.p.
Vancouver	3.1 p.p.	-1.7 p.p.	4.7 p.p.
Montreal	0.3 p.p.	-1.1 p.p.	1.4 p.p.

* The change associated with immigrants can result from both the rising share of immigrants (particularly recent immigrants) in the cities, as well as the rise in low-income rates among immigrants.

Source: Picot and Hou, 2003

For Canada as a whole, there was little change in the low-income rate during the 1990s. This was the result of two offsetting trends; changes among the Canadian-born tend to push down the rate by 1.0 percentage points, and changes among immigrants tended to increase it by 1.0 points.

However, one should recall that we are discussing *change* in low-income rates. If one concentrates on the *level* of low-income, immigrants still hold a minority, although increasing, position. In 2000, 28.5% of the low-income population were immigrants, up from 20% in 1980.

4. Why the Decline in Relative Entry Level Earnings, and Rising Low-Income Among Recent Immigrants?

Researchers have, for some time, been attempting to determine the cause of the decline in entry level earnings in particular. There is no shortage of possible explanations. Following are a few of the more prominent potential explanations. There are no doubt others. This short outline cannot do justice to many of these possible explanations, and interested readers are advised to read the papers referenced for fuller explanations.

- **The Changing Characteristics of Immigrants Entering Canada**

As is well known, immigrants are entering Canada from very different countries now than was the case in, say the 1970s. Between 1981 and 2001, a decreasing share of immigrants came from the U.S., Northern Europe, Southern Europe, the Caribbean, South and Central America, and Southeast Asia. The share of “recent” immigrants from these areas fell from 65% to 28%. Regions increasing their shares included Eastern Europe, South Asia (India, Pakistan), East Asia (China, Korea, Japan), Western Asia (Iraq, Iran, Afghanistan) and Africa. Collectively, the share of recent immigrants from these regions rose from 35% in 1981 to 72% in 2001. Immigrants from these source regions may have lower earnings at entry, even with comparable levels of education and experience. Their human capital may initially be less transferable due to potential issues regarding language, cultural differences, education quality, and possibly discrimination.

There have been other changes in the characteristics of immigrants that may have negatively affected entry level earnings; fewer entering immigrants have a home language that is either English or French (although unfortunately we do not have good measures of language ability at entry).

Studies such as Baker and Benjamin (1994); Frenette and Morissette (2003); Aydemir and Skuterud (Forthcoming), suggest that perhaps one-third of the decline in entry level earnings is associated with these changing characteristics of entering immigrants, particularly the shift in source regions and home language—an important but not dominant factor.

- **Other Factors Possibly Associated with the Shift to the Newer Source Regions: Education Quality, Language Skills and Discrimination**

There are other largely immeasurable effects that may be associated with the change in the source regions. One factor relates to a potentially lower quality education system in some of the countries from which immigrants now arrive. Sweetman (2003) has attempted to focus on this issue by using the test scores in an international literacy and numeracy survey to proxy a country’s quality of education. He finds some support for the notion that lower school quality in some of the newer source regions contributes to the decline in entry level earnings. A decline in language skills among entering immigrants may be another potential contributor. Language and communication skills are related to productivity, and hence the wages of workers.

Unfortunately, good quality data on change through time in the language skills (in either official language) of recent immigrants does not exist. Hence it has been difficult for researchers to assess the impact of this variable. Even if conversational skills appear adequate, it may be that immigrants’ ability to work in either of the official languages when performing more complex tasks has declined among entering immigrants. A recent paper by Ferrer, Green and Riddell (2003) asks whether the decline in returns to foreign experience (discussed later) may be related to increased relative (to younger immigrants) literacy or numeracy issues among older immigrants. They use detailed data with test scores on literacy and numeracy, and find little evidence to support this notion.

Increased discrimination is also a possibility; the number of immigrants who are visible minorities has increased significantly. Here again, the data to reliably estimate the effect of this factor are scarce. It may be that some of these issues (e.g., language, school quality, discrimination) are more prevalent among immigrants from the more recent source countries (Eastern Europe, Asia, Africa), and a shift in immigration to these countries has increased the importance of these issues for immigrants as a whole, resulting in a decline in entry level earnings. If this were so, then the effects would be picked up in the type of statistical analysis reported above, which indicated that roughly one-third of the earnings decline is related to the changing composition of immigrants by source country and other factors. If the importance of these issues is *changing* for particular source countries (e.g., declining school quality relative to the Canadian system, increasing discrimination for people from particular countries, deteriorating language skills from immigrants within country), or if the importance of these issues is increasing in the Canadian labour market (e.g., similar language deficiencies are more of a detriment to immigrants now than used to be the case, because language/communications demands are increasing), then they would not be captured in the “one-third” mentioned above. Assessing the effect of such changes is difficult given the data available.

- **The Returns to Years of Schooling and the Credentialism Issue**

Returns to years of schooling have been declining among immigrants from the newer source countries in particular (Aydemir and Skuterud, Forthcoming). A year of university education, for example, when converted to earnings in the labour market, was worth less to recent immigrants in the late 1990s than during the 1960s. This was occurring *within* source regions, not simply as a result of the changing composition of immigrants by source region. Hence, we saw the earnings of university-educated immigrants decline, and their low-income rate increase, along with immigrants of other education levels. However, researchers studying the credentialism issue have posed the question in a slightly different manner. They ask, after accounting for years of schooling, how much is the fact of having the university credential (i.e., degree) itself worth to an immigrant. This is referred to as the “sheepskin” effect. Is the earnings advantage of having a university degree (relative to not having it) changing? This credentials concern has been expressed for a number of years. However, to contribute significantly to the *decline* in entry level earnings, this effect would have to have become more important in recent years.

Based on recent evidence from two papers (Ferrer and Riddell, 2003, Aydemir and Skuterud, Forthcoming), it seems unlikely that this is in fact happening. This research focuses on the “sheepskin” effect; the value of a university degree itself (not the number of years of schooling required to obtain the degree, but the fact of having this credential). The research does not distinguish between degrees in fields that are licenced (e.g., medicine and engineering) and those that are not (e.g., history and economics). Nonetheless, the results are instructive. Both studies find that having a degree increases immigrants earnings significantly (relative to not having a degree), and that this effect is stronger for immigrants than for the native born. However, they conclude that this credentials advantage has changed little since the early 1980s for immigrants. This does not mean that the earnings of immigrant degree holders have not declined. As noted earlier they have fallen, since the returns to years of schooling have fallen.

Rather, it means that the *relative* advantage to having a university degree (relative to not having it) has not changed significantly. This suggests that, across all disciplines, the “credentialism” issue has not worsened (although it may or may not have in specific fields). Degree holders have not been exempt from the deterioration in earnings outcomes, however, as noted earlier in the paper.

- **Declining Returns to Foreign Labour Market Experience**

Another factor that is taking on increasing importance in the very recent research is referred to as “declining returns to foreign experience”. Put another way, one could think of this as the increasing concentration of the earnings decline at entry among older immigrants. Human capital consists largely of education/training and the skills developed through work experience. One typically expects some return to this human capital when entering employment.

It has been observed in a number of recent studies that the foreign work experience of entering immigrants is increasingly discounted in the Canadian labour market (Schaafsma and Sweetman, 2001; Green and Worswick, 2002; Frenette and Morissette, 2003; Aydemir and Skuterud, Forthcoming). Put another way, older immigrants entering Canada, who in the late 70s or early 80s earned significantly more than their younger counterparts, presumably because of their experience (controlling for education etc.), now have much less of an advantage. Their foreign work experience appears to be more heavily discounted now as compared to say twenty years ago. Schaafsma and Sweetman (2001) observed that age at immigration matters. Using Census data from 1986 to 1996, they found that older workers experienced, on average, low returns to both foreign labour market experience and foreign education. As part of the research program initiated by the research arm of Citizenship and Immigration Canada, Green and Worswick (2002) observed that returns to foreign experience were falling for successive entering immigrant groups, thus making this a possible explanation for the declining entry level earnings. They also observed this effect among both family and economic classes, so it is not driven by a shift in immigrant class.

Green and Worswick (2002) conclude that the declining returns to experience is one of the major factors, if not the most important, associated with the decline in earnings among recent immigrants, as do Aydemir and Skuterud. Frenette and Morissette provide support for this notion. They observe that between 1980 and 2000, earnings did not in fact decline among very young “recent” immigrant workers (age 25 to 29), and that the decline was concentrated among male immigrant workers over age 30. Green and Worswick, when first observing this effect, suggest that it may be related to both the shift in the composition of immigrants towards those from source countries from which it is more difficult to evaluate the benefits of the foreign experience, and a decline in the returns to foreign experience *within* source regions. They conclude that this decline in returns to foreign experience is not evident among immigrants from the traditional source regions (e.g., Northwestern Europe, the English-speaking countries) and is concentrated among immigrants from the nearer source regions. Aydemir and Skuterud find much the same; that the decline in returns to foreign labour market experience are observed only among immigrants from the “non-traditional” source regions, notably Eastern Europe, Asia, and Africa. Aydemir and Skuterud find that foreign experience has become almost worthless in the Canadian labour market for immigrants from these

regions.

Why the decline in returns to foreign experience within source regions. There is little hard evidence on this point. As noted above, Ferrer, Green and Riddell asked if it was related to relative literacy competencies between younger and older workers, and found that this accounted for little of the effect. Others have discussed the possibility of an emerging technology divide. The experience acquired with the technologies used in the Eastern European and Asian countries may not be directly applicable to the Canadian workplace, and hence the discounted returns to experience. This effect could be increasing in importance as technologies change more rapidly in more advanced countries like Canada. It may also be that with a rapidly rising supply of highly-educated workers in Canada (see point below), employers have less incentive to take the time to evaluate the foreign experience (and years of schooling) of immigrants, particularly the highly educated. Thus, the experience and schooling is somewhat discounted. This is speculation at this point.

Aydemir and Skuterud conclude that, among recent immigrants, the declining returns to years of schooling and in particular the declines in returns to foreign experience, account for roughly two-thirds of the decline in entry level earnings reported earlier.

- **Deteriorating Labour Market Outcomes for New Labour Market Entrants in General, of Which Immigrants are a Part**

Labour market outcomes for young labour market entrants, particularly males, have been deteriorating in Canada through the 1980s and 1990s. Earnings of young men have been falling through these decades (Picot, 1998; Beaudry and Green, 2000). Entering immigrants are themselves new labour market entrants, and it may be that whatever is causing the decline in earnings of the young in general (and that is not well understood) may be also affecting the earnings of “recent” immigrants. Green and Worswick find that, for recent immigrant men, this may account for 40% of the decline in entry level earnings. They also find, however, that this effect was concentrated in the 1980s; it was less important for the 1990s. Frenette and Morissette also conclude that this is a significant factor, as did Aydemir and Skuterud.

- **Fluctuations in Macro-Economic Conditions**

Canada experienced two severe recessions during the early 1980s and 1990s. It was during the early 1980s that a major decline in entry level earnings was first observed. Furthermore, the position of recent immigrants declined significantly again in the early 1990s, when immigration levels remained high during the recession. This has caused a number of researchers to speculate that changing macro-economic conditions played a major role in the earnings trends. Bloom and Gunderson (1991) and McDonald and Worswick (1998) noted the effect of the business cycle on immigrant earnings, and the latter concluded that immigrants are more negatively affected by recessions than are the Canadian-born. In a 1997 paper on unemployment rate differentials between immigrants and Canadian-born, McDonald and Worswick (1997) conclude that the unemployment gap is much larger in recessions, and much less, or near zero in expansions. Reitz (2001) concluded that fluctuations in macro-

economic conditions could not fully explain the general downward trend in immigrants' economic performance.

Aydemir (2002), focusing on employment and participation rate declines among immigrants (not earnings) concludes that macro-conditions (as measured by the unemployment rate) accounted for up to 50% of the decline in the participation rate among immigrants in the recession of the early 1990s, and less of the decline in the employment rate. There was a substantial deterioration in economic outcomes (participation and employment rates) even after accounting for macro-economic conditions. During the last half of the 1990s economic conditions improved dramatically; by 2000 unemployment fell to lows not seen in over 20 years. The relative earnings of immigrants (relative to comparable Canadian-born) improved marginally, but remained far below the levels observed in the 1970s, or even in the 1980s (as noted above). Hence, it seems unlikely that macro-economic conditions account for all or even most of the long-term decline in the relative earnings of recent immigrants.

- **Strong Competition from the Increasingly Highly-Educated Canadian-Born**

The supply of highly-educated workers in Canada has been increasing at a very rapid pace. The number of women in the labour force with a university degree quadrupled over just 20 years. For every woman in the labour force with a degree in 1980, there are now four. The number of men more than doubled. In studies on the "wage premium" associated with a university degree (i.e., the earnings of university graduates compared to high school graduates), it has been observed that, in general, this premium has increased significantly in the U.S., but little in Canada over the past twenty years⁵ (Burbidge et al., 2002). In the face of an apparently increasing demand for more highly-educated workers, why have the relative wages of university graduates risen in the U.S. but not in Canada? Two high profile papers argue that it is differences in the supply of highly-educated workers; this supply (relative to the high school educated) has been increasing much more rapidly in Canada than in the U.S. (Freeman and Needels, 1993; Murphy, Romer and Riddell, 1998).

Reitz (2001) argues that in spite of the rising educational levels of immigrants, their *relative* advantage in educational levels has declined as a result of the more rapidly rising levels of education among Canadian-born. He also argues that immigrants did not benefit to the same extent as Canadian born from increases in education. This fits with other findings that suggest that although the "sheepskin" effect (the fact of having a degree) has not diminished among immigrants, the returns to years of education have been falling among "recent" immigrants, and that if anything, labour market outcomes among university educated immigrants has been declining faster than among others (controlling for age), as noted above. It may be that in a very competitive labour market for new entrants, even the highly educated, that foreign experience and years of schooling from the "new" source countries are increasingly discounted, and that language and other factors associated with the new source regions place "recent" at a relative competitive disadvantage.

⁵ The wage premium has been increasing in recent years among the young in Canada, however.

- **Changes in Social Transfer Usage, and Other Income Sources**

The above-mentioned reasons may influence the earnings of immigrants, but low-income rates can be affected by other factors as well. Changes in the availability or use of the social transfer system (social assistance, employment insurance, etc.) by immigrants can obviously affect low-income rates. It may also be that income inequality has changed among the immigrant population. Most of the earnings analysis relates to mean or median earnings. Rising levels of family income inequality, unemployment or possibly a discouraged worker effect could result in increasing low-income rates, above and beyond that expected based on changes in mean family earnings. Little recent research has been done on these issues.

5. Conclusion

The economic welfare of recent immigrants deteriorated through the 1980s and 1990s. It seems unlikely that the rate of economic assimilation will be such as to allow many of these immigrants to achieve earnings or low-income rate levels comparable to Canadian-born, or even those of earlier immigrant cohorts (Frenette and Morissette, 2003). The possible reasons for this decline are numerous, and are not, of course, necessarily independent of one another. For example, increased competition from domestic labour sources, combined with a shift in the source regions of immigrants may together result in a reduced ability of immigrants to convert their education and experience into earnings. It may also be that declining returns to foreign experience, decreasing language ability (if this is the case, which is largely unmeasured) and changes in discrimination may themselves be related to changes in source country.

Given the current research, it appears as if some (perhaps one-third) of the decline in aggregate earnings of entry level immigrants was to be expected, because of the shift in language skills and source region. The rising levels of education should have offset this to some extent. Among the other potential causes listed, the declining returns to foreign experience seem to top the list. The deterioration in outcomes is more heavily concentrated among older workers. Many other factors play a role, including declining returns to years of schooling. One can account for much of the decline by focusing on these three factors (Aydemir and Skuterud). The debate over the possible reasons will continue.

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